

HEART FAILURE

CARE PROCESS STEP	EXPECTATIONS	RATIONALE
ASSESSMENT / PROBLEM RECOGNITION		
<p>1. Did the staff and physician identify individuals with a history of heart failure, and/or risk factors for heart failure?</p>	<ul style="list-style-type: none"> - The staff and practitioner use the transfer summary and other referral data and the nursing home clinical record to help identify individuals with a history of heart failure and risk factors for heart failure. - The staff and practitioner review existing lab and diagnostic test results to indicate areas for additional investigation. - This review of risk factors occurs on admission, at least quarterly, and with any acute change of condition involving cardiac or pulmonary symptoms. - Refer to Table 3, AMDA Risk Factors for Heart Failure (attached). 	<ul style="list-style-type: none"> - The history provides critical information that is needed to provide subsequent care. - Copies of electrocardiograms, echocardiograms, lab results (electrolytes, hemoglobin, renal function, etc.), and chest x-ray reports and their previous interpretation may be particularly useful at the time the patient is transferred from the hospital to the nursing facility. - Heart failure may be present in individuals with other conditions that put an additional strain on the heart, such as anemia, COPD, and other lung diseases. - Examples of risk factors for heart failure include valvular heart disease (e.g., aortic stenosis), atrial fibrillation, anemia, and thyroid disease (hypo- or hyperthyroidism). - At-risk individuals may have a decline in cardiac status if they get an acute infection or another acute illness.
<p>2. Did staff identify individuals who currently have heart failure?</p>	<ul style="list-style-type: none"> - The staff and practitioner seek signs and symptoms and diagnostic test results that suggest heart failure and document the findings. - Refer to AMDA HF CPG Tables 1 (Signs that Suggest Heart Failure) and 2 (Symptoms that Suggest Heart Failure). 	<ul style="list-style-type: none"> - Key symptoms may include decreased activity level, shortness of breath, unexplained cough, unexpected or progressive weight gain associated with fluid retention, sleep disturbance, orthopnea (dyspnea while horizontal), or new or increasing lower-extremity swelling. - Physical signs may include rales in the lungs, tachypnea (increased respiratory rate), tachycardia, jugular venous distension, and

		<p>edema.</p> <ul style="list-style-type: none"> - Examples of diagnostic test findings that may indicate possible heart failure include chest x-ray evidence of bilateral infiltrates, pulmonary edema, or pleural effusions. - Some additional symptoms of heart failure that may be confused with other physical and psychosocial concerns include: decreased food intake, decline in function, acute confusion, delirium.
3. Did the staff and practitioner identify the severity and consequences of heart failure?	<ul style="list-style-type: none"> - The staff and practitioner identify the impact of heart failure on the resident's function and quality of life; for example, based on the New York Heart Association (NYHA) classification or something comparable. - Refer to Table 4, New York Heart Association Functional Classification. - Where the resident is having recurrent heart failure, or their function is declining due to heart failure, and where improvement in heart failure may help them reach a desired quality of life, the practitioner seeks additional details that may help target interventions; for example, distinguishing systolic and diastolic dysfunction. 	<ul style="list-style-type: none"> - Identifying causes and severity is the basis for determining prognosis and selecting appropriate interventions, especially in individuals with recurrent heart failure or who do not respond to various interventions. - Examples of consequences of heart failure may include dyspnea on exertion, activity intolerance, easy fatigue, insomnia / sleep disturbance, anorexia, restlessness, or overall decline in function. - When indicated to further define heart failure in select individuals, an echocardiogram (if available) can help establish whether heart failure is primarily systolic, diastolic, or both, and can also identify valvular heart disease, which can cause heart failure. - Systolic and diastolic dysfunction has different causes and may need different approaches. Systolic dysfunction involves impaired ejection of blood from the heart during systole with an ejection fraction (EF) at or below 40%. In diastolic dysfunction the left ventricle may be stiff, resulting in impaired filling during diastole. A resident may have both types of heart failure.
DIAGNOSIS / CAUSE IDENTIFICATION		
4. Did the practitioner and staff clarify known	<ul style="list-style-type: none"> - The practitioner and staff seek and identify potentially treatable causes of heart failure, such 	<ul style="list-style-type: none"> - A basic evaluation for heart failure might include a detailed cardiopulmonary history,

causes of an individual's heart failure, or seek causes if not already identified?	as an arrhythmia (e.g., atrial fibrillation), hypo- or hyperthyroidism, renal failure, medication adverse consequences, and moderate to severe anemia, where interventions may be helpful to the resident, and seek to identify irreversible causes to help establish prognosis. - Refer to Table 5, AMDA Reversible Etiologies of Heart Failure.	physical examination, laboratory tests (complete blood count, electrolytes, thyroid stimulating hormone, serum creatinine, and urinalysis), chest x-ray, and electrocardiogram. - Knowing whether there is an irreversible underlying cause of heart failure may influence other decisions about aggressiveness of medical interventions for other conditions and risks.
TREATMENT / PROBLEM MANAGEMENT		
5. Did the practitioner and staff treat the heart failure?	- The practitioner treats heart failure, based on established recommendations, consistent with individual goals and circumstances. - Refer to American College of Cardiology Website http://www.acc.org	- Overall goals for treating heart failure should be compatible with the individual's choices, values, overall condition, and prognosis. - Treatment selection depends on the goals of treatment and on other factors such as the category and causes of heart failure. - Medication selection should also be based on current evidence-based clinical guidelines. - A key goal of intervention for systolic dysfunction is to improve the heart's output during each contraction. - Key goals of intervention for diastolic dysfunction are to decrease fluid volume overload and treat elevated filling pressures.
6. Did the staff and practitioner treat contributing factors and underlying causes of heart failure?	- The practitioner and staff manage treatable contributing factors and causes of heart failure such as acute respiratory illnesses, arrhythmias, anemia, and hypo- or hyperthyroidism. - The staff and practitioner evaluate and manage, as indicated, the individual's fluid volume status (which may be normal, reduced, or overload).	- Interventions vary, depending on fluid volume status. For example, edema or other indicator of increased fluid volume may require diuretics and fluid restriction. - In individuals with heart failure, the BUN/creatinine ratio must be interpreted carefully, because it could indicate fluid overload or fluid volume depletion. - Excessively low circulating blood volume should be corrected before initiating ACE inhibitors, or it may indicate the need to taper or

		<p>stop current ACE inhibitors until the circulating volume is corrected.</p> <ul style="list-style-type: none"> - Various medications can directly or indirectly influence cardiac function and heart failure. - Treating acute illnesses and optimizing management of chronic conditions can help stabilize or improve cardiac function. - Influenza and pneumonia vaccines may prevent illness that can exacerbate heart failure.
7. Did the staff and practitioner implement other relevant interventions?	<ul style="list-style-type: none"> - The staff and practitioner identify additional relevant interventions, such as dietary counseling and diet modification, exercise, smoking cessation. - The staff and practitioner address end-stage heart failure including advance directives and end-of-life issues. - Refer to American College of Cardiology Website http://www.acc.org <p>The staff/practitioner provides education to the individual/family related to heart failure prevention <u>or</u> provides rationale as to why it is not feasible to do so.</p>	<ul style="list-style-type: none"> - A regular, no added salt diet is adequate for many individuals with heart failure; for others, more severe sodium restrictions may be needed. Some individuals may exercise their rights to decline recommended interventions and dietary restrictions. - Heart function influences, and is influenced by, the function and limitations of all other organ systems in the body. Determination of condition and prognosis should consider the whole person, not just the status of any one organ system. - An individual with advanced or unstable heart failure may need additional nutritional interventions, because of increased energy expenditure. - When the patient, family or advocate, and care team decide that palliative care is most appropriate, symptom relief and psychosocial and spiritual considerations may prevail over cardiac-specific goals.
MONITORING		
8. Did the staff and practitioner appropriately implement approaches to managing the individual with heart failure?	<ul style="list-style-type: none"> - The facility, with input from the medical director, monitors whether a practitioner's management of heart failure is consistent with pertinent standards of clinical practice, such as 	<ul style="list-style-type: none"> - Making appropriate interventions consistently is most likely to produce desirable outcomes. - Trying to manage heart failure without

	<p>those found in the professional literature and related protocols and guidelines.</p> <ul style="list-style-type: none"> - The facility monitors whether the staff are providing selected approaches consistently and correctly. 	<p>following a consistent process can contribute to avoidable adverse consequences such as decline in function and recurrent hospitalization, and may have a negative effect on function and quality of life.</p>
<p>9. Did the staff and practitioner evaluate and document the progress of a resident's cardiac status, including complications?</p>	<ul style="list-style-type: none"> - The staff and practitioner document their assessment of the individual's heart function, as well as any physical, functional, and psychological complications. The extent and frequency of monitoring are consistent with the individual's stability and complications. - The medication regimen is reviewed and modified as needed to maximize benefit and minimize adverse consequences. - The staff and practitioner evaluate and document clinically pertinent explanations (for example, irreversible underlying causes or an end-of-life situation) for a patient's failure to achieve cardiac and functional goals. 	<ul style="list-style-type: none"> - Monitoring should include (among other things) vital signs, responsiveness to treatment, overall functional status, status of related comorbid conditions, sense of well-being, and nutritional and fluid volume status. - More frequent monitoring may be needed if the individual is medically or functionally unstable. - Lab monitoring may include basic metabolic profile (BMP), serum medication levels and manufacturer recommended monitoring for toxicity and adverse consequences (for example, digoxin level if toxicity is suspected).
<p>10. Did the staff and practitioner monitor for, and address, complications of treatment for heart failure?</p>	<ul style="list-style-type: none"> - The staff and practitioner identify and manage complications, such as hypotension and cognitive and mood disturbances, related to treatment for heart failure and the medications used to treat heart disease including heart failure. - The practitioner addresses problems related to reduced circulating blood volume (for example, symptomatic hypotension related to diuretics or other cardiac medications). 	<ul style="list-style-type: none"> - Cardiac medications may cause complications (both heart-related and non-heart related) such as symptomatic bradycardia or heart block, hypotension, marked fatigue, depression, increased shortness of breath, renal failure, cough, anorexia, hyperkalemia, high or low serum sodium, and worsening of heart failure. - Examples of lab monitoring for treatment complications may include basic metabolic profile (BMP), serum medication levels and manufacturer recommended monitoring for toxicity and adverse consequences (for example, digoxin level if toxicity is suspected or thyroid function in someone receiving amiodarone).